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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/462,765	06/02/00	GUTMAN	R 440191/PALL

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EXAMINER

SAVAGE, M

ART UNIT

PAPER NUMBER

1723

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trad marks

Office Action Summary

Application No.
09/462,765

Applicant(s)
Gutman et al

Examiner
Matthew Savage

Group Art Unit
1723



☒ Responsive to communication(s) filed on Nov 29, 2000

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire three month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-42 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-42 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____

☒ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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Applicant's election of claims 1-42 in Paper No. 6 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claims 10-12 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The specification fails to adequately disclose the composition corresponding to the trademarks "FLUORODYNE" and "SUPOR".

Claims 6 and 10-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claims 10-12, it is unclear as to how the filter medium can be hydrophobic when the medium has been defined as being water wettable in independent claim 1.

Concerning claim 6, it is unclear as to what composition the terms "FLUORODYNE" and "SUPOR" imply.

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pall '483 in view Ohtani or Meyering et al or Pall '688.

With respect to claim 1, Pall '483 discloses a plastic housing 1,2 providing an inlet port 4 and an outlet port 6, the housing being capable of sterilization with steam (see lines 45-60 of col. 6) formed of a filter element 3 in the housing, the filter having a central passage, a first end cap attached to a first end of the filter medium to close the central passage, and a second end cap attached to a second end of the filter medium and providing a fluid connection between the passage and the outlet port. Pall '483 fails to specify the filter medium as being embedded in the end caps, the filter media being of water wettable material, and the first and second end caps as forming water wettable joints with the filter medium. Ohtani disclose a filter element including filter medium embedded in end caps (see lines 14-25 of col.5) of a filter medium formed of water wettable material with first and second ends that form water wettable joints with the filter medium (see the abstract) and suggests that the joint between the filter medium are leak free and can be integrity tested (see the examples in columns 6-8). It would have been obvious to have modified the filter of Pall so as to have included a filter element as suggested by Ohtani in order to provide a leak free joint between the filter medium that can be integrity tested. In addition Meyering

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disclose a filter element including filter medium embedded in end caps (see lines 10-35 of col.9) of a filter medium formed of water wettable material with first and second ends that form water wettable joints with the filter medium (see lines 36-38 of col.9) and suggests that the joint between the end caps and filter medium are leak free. It would have been obvious to have modified the filter of Pall so as to have included a filter element as suggested by Meyering et al in order to provide a leak free joint between the filter medium that can be integrity tested. In addition, Pall '688 discloses filter mediums embedded in end caps and suggests that suggests that the joints between the end caps and filter medium are leak free. It would have been obvious to have modified the filter of Pall '483 so as to have included a filter element as suggested by Pall '688 in order to provide a leak free joint between the end cap and filter medium.

Concerning claim 2, Ohtani and Meyering disclose heating the end caps to soften the end caps and inserting each one of the first and second ends into the associated end cap while the associated end cap is softened (see lines 14-25 of col.5 of Ohtani, and lines 56-65 of col.8).

Regarding claim 3, Ohtani and Meyering discloses the first and second end cap plastic material being such that the characteristics of the filter medium adjacent the end cap are not altered by the embedding because Ohtani discloses the same combination of end cap material and filter medium as disclosed in the instant specification (e.g., polypropylene end cap and PVDF filter medium disclosed on line 49 of col. 3 and line 15 of col. 5 of Ohtani, and polyester or nylon end caps and a nylon filter medium disclosed on lines 24 and 26 of col.9 and lines 64-68 of col.9 of Meyering et al).

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Concerning claim 4, Ohtani discloses a filter medium composed of PVDF and end caps formed of polypropylene.

Regarding claim 5, Ohtani discloses filter medium composed of polysulfone (see line 50 of col. 3) and end caps formed of polypropylene.

With respect to claim 6, Ohtani and Meyering disclose polypropylene end caps but fails to specify filter medium of FLUORODYNE or SUPOR medium, however, such membrane materials are well known in the art and would have been obviously selected to optimize the filter for a particular application.

Concerning claim 7, Meyering disclose filter medium of nylon and end caps of polyester or nylon polyester (see lines 24 and 26 of col.9 and lines 64-68 of col.9).

Concerning claim 8, Ohtani and Meyering disclose filters that are considered integrity testable.

Concerning claim 9, Ohtani and Meyering disclose plastic materials having the characteristics as recited in the instant claim because the references disclose the same combination of end cap materials and filter media materials as disclosed in the instant specification.

Regarding claims 10-12, the combination of Pall '483, Ohtani, Meyering, and Pall '688 disclose polypropylene end caps but fails to specify the recited filter mediums, however, such filter mediums are well known in the art and would have been obviously employed in order to optimize the filter for a particular application.

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Regarding claim 13, Pall '483 discloses a housing capable of functioning as disclosed in the instant claim because the housing is formed of the same material as disclosed in the instant specification (see lines 45-60 of col.6)..

Concerning claim 14, Pall '483 disclose the housing as being formed of polysulphone.

Regarding claim 15, Pall '483 discloses generally annular filter medium, a disk shaped end cap 9, and an annular end cap 10.

As to claim 16, Ohtani, Meyering, and Pall '688 disclosed pleated filter medium.

Regarding claim 17, Meyering et al disclose a second end cap 34 having a projection 38 for reception in the associated port of a housing.

Concerning claim 18, Pall '483 discloses a housing having first and second end walls (see FIG.1), the port 2 being in fluid communication with the second end cap 10 in the second end wall, the filter element extending from the second end wall towards the first end wall.

As to claim 19, Pall '483 discloses the housing as having a side wall (see FIG.1).

Regarding claim 20, Pall '482 discloses the housing as being formed by first and second housing parts 1,2 connected together.

As to claim 21, Pall '483 disclose the first housing part 1 as including the first end wall and the side wall and the second housing part 10 as including the second end wall.

Regarding claim 22, Pall '483 discloses the first housing part and the second housing part as cooperating to clamp the filter element between the housing parts to hold the filter in the housing (e.g., part 16 of the filter being clamped between parts 1 and 2, see FIG.3).

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As to claim 23, Pall '483 discloses the filter element as including first and second oppositely facing clamping surfaces (e.g., defined by part 16), the first housing part 1 bearing against the first clamping surface and the second housing part 2 bearing against the second clamping surface (see FIG.3).

Regarding claim 24, Pall '483 discloses the first and second clamping surfaces as being formed on the second end cap 10 (see FIG.3).

Concerning claim 25, Pall '483 discloses the first clamping surface as being formed on a flange 16 projecting from the second end cap.

Regarding claim 26, Pall '483 discloses the housing as being formed by first and second housing parts 1,2 connected together, the first and second housing parts cooperating to clamp the filter element between the housing part to hold the filter element in the housing (see FIG.3), the filter element including first and second oppositely facing clamping surfaces (e.g., defined by part 16), the first housing part bearing against the first clamping surface and the second housing part bearing against the second housing surface, the first and second clamping surfaces formed on the second end cap, the second clamping surface being formed on a portion of the second endcap extending around the projection in the case that the Meyering et al filter is employed.

Concerning claim 27, Pall '483 discloses the first housing part as having a peripheral edge 1b remote from the first end wall, the peripheral edge bearing against the flange 16 to force the second clamping surface against a portion of the second end wall of the housing around the port.

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Regarding claim 28, Pall '483 discloses the filter medium 43 as being annular and having a curved exterior surface surrounded by a cage 30. In addition, Pall '688 discloses filter medium as being annular and having a curved exterior surface surrounded by a cage 15.

Concerning claim 29, Pall '688 discloses the cage as being formed of the same material as the end caps (see lines 1-6 of col.8).

Regarding claim 30, Pall '483 discloses the housing as including at least one valve (see lines 52-56 of col. 5).

With respect to claims 31-33, Pall '483 fails to specify the valve as being formed of a material that can be heat sterilized, however, such a modification would have been obvious in order to prevent contamination of the liquid being treated because the reference discloses that the filter housing that can be heat sterilized.

Concerning claim 34, Pall '483 fails to specify the valve as being formed from the recited materials, however, construction of valves from such material is well known in the art and would have been obvious in order to provide a valve that was cheap to fabricate and heat resistant to permit sterilization.

Claims 35-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pall '483 in view Ohtani or Meyering et al or Pall '688 as applied to claim 30 above, and further in view of

Wagner.

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With respect to claim 35, Pall '483 fails to specify the recited details of the valve. Wagner discloses a valve including annular sleeve 17 surrounding a passage 10 generally circular in cross section as recited in the claim as suggests that such a valve is cheap to construct. It would have been obvious to have modified the combination suggested by Pall '483, Ohtani or Meyering et al or Pall '688 so as to have include a valve as suggested by Wagner in order to provide a valve that was cheap to construct.

Concerning claims 36 and 37, Wagner discloses a valve member 12-15 capable of functioning as recited in the instant claim.

Regarding claim 38, Wagner discloses the sleeve 17 and valve member 12-15 as being connected together, the valve member extending into an end of the passage 10 and including a passage 15 capable of functioning as recited in the instant claim.

Concerning claim 39, Wagner discloses the valve as including a mechanism (e.g., sleeve 17 including the threads 19) capable of functioning as recited in the instant claim.

Regarding claim 40, Wagner discloses a mechanism capable of limiting axial movement of the valve (e.g., the valve member and stop 21).

Concerning claims 41 and 42, Wagner fails to specify the recited pin and slot arrangement, however, such arrangements are well known obvious equivalents in the valve art for increasing the extent of axial motion of a valve member per rotation of the valve member..

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The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Savage whose telephone number is (703) 308-3854. This examiner can normally be reached from Monday through Friday from 7:00 AM to 3:30 PM.

The fax numbers for this Group are as follows:

(703) 305-3599 for after final amendments;

(703) 305-7718 for regular amendments;

(703) 305-3602 for un-official papers, e.g., proposed claim amendments for discussion during personal or telephone interviews.


Matthew O. Savage
Primary Examiner
Art Unit 1723

M. Savage
February 12, 2001